# University of Toronto
# Department of Economics
# Course Outline

ECO2512H1S, L0101
Topics in Business Cycles
Professor M. Alexopoulos
malex@chass.utoronto.ca

Times and location: We will meet every Wednesday from 11-1 in GE 100.

Office Hours: By appointment

Grading Scheme: There will be one term test for all students, held during class time on Feb 11. It will make up 50% of the final course grade. The remainder of the final mark will be determined as follows:

*For PhD students:* Each student will be responsible for presenting a paper during the final 3 classes. I will meet with you to discuss your interests and help select a paper The presentation will be 75 minutes in length and should aim to teach the material to the class. Your grade for the presentation (including your understanding of the material presented) will count for 15% of your final grade. The remaining 35% will be based on an original paper proposal. I will ask you to provide me with a topic you intend to pursue by the fourth week of class. Your paper should be approximately 15-20 pages in length and include an up to date literature review of the topic and an original model. While you will not be required to solve the complete model, you should: (1) explain the components of the model and why you believe this would yield an improvement over those in the literature, (2) derive the equilibrium conditions, (3) discuss which data can be used to calibrate or estimate the model, and (4) be able to characterize the steady state of the model.

*For MA and MFE students:* During the final weeks of class, you will be required to do a presentation on one of the papers presented by the PhD students. The presentation should summarize the main points in the paper, explain how the paper contributes to the literature highlight any potential weaknesses in the paper and discuss . This presentation will be appoximate 20 minutes in length and will be graded on your presentation skills and your understanding of the material. The presentation will be 15% of your final grade. The final 35% of the grade will be determined by a literature review that should be between 15 and 20 pages that will be based on topics I will assign to you during the forth week of classes after a discussion with each of you.

**Copies of all presentation materials should be provided to me no later than three days in advance of the presentation.

# Topics and Relevant Readings for weeks 1-9

## 1. Baseline Neoclassical Business Cycle Model

- D. Romer, Advanced Macroeconomics, Chapter 4
- Frontiers of Business Cycles: Introduction

## 2. Solution techniques:

- Cocharne's notes
- Christiano, Lawrence. (1998). "Solving Dynamic Equilibrium Models by a Method of Undetermined Coefficients", Technical Working Paper 225, NBER, Cambridge, Mass. (Can be downloaded from www.nber.org)

## 3. Baseline Montary business cycle models

- Christiano, Lawrence, Martin Eichenbaum and Charles Evans. (1997). "Sticky Price and Limited Participation Models of Money: A Comparison", *European Economic Review* 41, 1201-49
- Christiano, L.J., Eichenbaum, M. and C. Evans 2005, "Nominal rigidities and the dynamic effects of a shock to monetary policy", Journal of Political Economy, 113(1), 1-46.
- Frank Smets & Rafael Wouters, 2007. "Shocks and Frictions in US Business Cycles: A Bayesian DSGE Approach," American Economic Review, vol. 97(3), 586-606.

## 4. Exploring Some Sources of business cycles:

### *Monetary Policy Shocks*

- Christiano, Lawrence J. & Eichenbaum, Martin & Evans, Charles L., 1999. "Monetary policy shocks: What have we learned and to what end?," Handbook of Macroeconomics, in: J. B. Taylor & M. Woodford (ed.), Handbook of Macroeconomics, edition 1, volume 1, chapter 2, pages 65-14
- Romer, Christine D. and David H. Romer. 2004. A New Measure of Monetary Shocks: Derivation and Implications. The American Economic Review, 94, No. 4 (Sep) 1055-1084.

### *Technology shocks and business cycles*

- Basu, Susanto, John Fernald and Miles Kimball. "Are Technology Improvements Contractionary?" Manuscript, University of Michigan, 2004 (also available from www.nber.org as a working paper).
- Gali, Jordi. "Technology, Employment, and the Business Cycle: Do Technology Shocks Explain Aggregate Fluctuations?" *American Economic Review* 89 (March 1999), 249-71.
- Christiano, Lawrence, Martin Eichenbaum and Robert Vigfussen. 2004. "What happens after a technology shock?" Manuscript, Northwestern University. (download from http://www.faculty.econ.northwestern.edu/faculty/eichenbaum/)
- Shea, John , 1998. "What Do Technology Shocks Do? "NBER macroeconomics annual 1998. pp. 275-310
- Alexopoulos, Michelle. 2011 "Read all about it!! What happens following a technology shock?" *American Economic Review*

### *Investment specific shocks*

- Greenwood, Jeremy & Hercowitz, Zvi & Krusell, Per, 2000. "The role of investment-specific technological change in the business cycle," European Economic

Review, Elsevier, vol. 44(1), 91-115.

- Jonas D. M. Fisher, 2006. ”The Dynamic Effects of Neutral and Investment-Specific Technology Shocks,” Journal of Political Economy vol. 114(3), 413-451.

*Anticipated technology shocks (News shocks)*

- Beaudry, Paul & Portier, Franck, 2004. ”An exploration into Pigou’s theory of cycles,” Journal of Monetary Economics, Elsevier, vol. 51(6), pages 1183-1216
- Paul Beaudry & Franck Portier, 2006. ”Stock Prices, News, and Economic Fluctuations,” American Economic Review, American Economic Association, vol. 96(4), pages 1293-1307
- Nir Jaimovich & Sergio Rebelo, 2009. ”Can News about the Future Drive the Business Cycle?,” American Economic Review, American Economic Association, vol. 99(4), pages 1097-1118

*Fiscal Policy Shocks*

- Christiano, Lawrence J & Eichenbaum, Martin, 1992. ”Current Real-Business-Cycle Theories and Aggregate Labor-Market Fluctuations,” American Economic Review vol. 82(3), pages 430-50
- Edelberg, Wendy, Martin Eichenbaum and Jonas Fisher. 1999. “Understanding the effects of a Shock to Government Purchases”, *Review of Economic Dynamics 2*,166-206
- Ramey, V. and M. Shapiro.1997. ”Costly Capital Reallocation and the Effects of Government Spending.”, Carnegie Rochester Conference on Public Policy.
- Ramey, V. 2011.Identifying Government Spending Shocks: It’s All in the Timing,” Quarterly Journal of Economics 126, 1-50.

*Uncertainty Shocks*

- Bernanke, Benjamin.1983. Irreversibility, Uncertainty and Cyclical Investment. Quarterly Journal of Economics, 98, No.1 (Feb), 85–106.
- Bloom, Nicolas. 2009. The Impact of Uncertainty Shocks. Econometrica, 77, No. 3 (May), 623-685.
- Romer, Christine D. 1990. The Great Crash and the Onset of the Great Depression. The Quarterly Journal of Economics, 105, No. 3 (Aug) 597-624.
- Alexopoulos, M and J. Cohen 2009. "Uncertain Times, Uncertain Measures"University of Toronto Working Paper

*****Most of the published papers on this list can be downloaded from Jstor and/or the other electronic sources available through the UofT library. The other reading material (chapters in the books) can be picked up for photocopying from my office.